

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/000608

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl' C12N15/54, C12N9/10, C12N1/19, C12N1/21, C12N5/10, C07K16/40

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl' C12N15/54, C12N9/10, C12N1/19, C12N1/21, C12N5/10, C07K16/40

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI/BIOSIS (DIALOG), MEDLINE (STN), JSTPlus (JOIS),
GenBank/EMBL/DDBJ/GeneSeq, SwissProt/PIR/GeneSeq

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Taga S. et al., Sequential changes in glycolipid expression during human B cell differentiation: enzymatic bases., Biochim.Biophys.Acta, January 1995, Vol.1254, No.1, pages 56 to 65	1-16
A	JP 2002-85069 A (Seikagaku Corp.), 26 March, 2002 (26.03.02), (Family: none)	1-16
A	Uyama T. et al., Molecular cloning and expression of human chondroitin N-acetylgalactosaminyltransferase-, J.Biol.Chem., March 2002, Vol.277, No.11, pages 8841 to 8846	1-16

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
13 February, 2004 (13.02.04)Date of mailing of the international search report
02 March, 2004 (02.03.04)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Wandal H.H. et al., Substrate specificities of three members of the human UDP-N-acetyl- α -D-galactosamine: Polypeptide N-acetylgalactosaminyltransferase family, GalNAc-T1, -T2, and -T3, J.Biol.Chem., September 1997, Vol.272, No.38, pages 23503 to 23514	1-16
A	Iwai T. et al., Molecular cloning and characterization of a novel UDP-GlcNAc: GalNAc-peptide β -1,3-N-Acetylglucosaminyltransferase (β 3Gn-T6), an enzyme synthesizing the core 3 structure of O-glycans., J.Biol.Chem., April 2002, Vol.277, No.15, pages 12802 to 12809	1-16
P,X	Hiruma T. et al., A novel human β -1,3-N-acetylgalactosaminyltransferase which synthesizes a unique carbohydrate structure, GalNAc β 1-3GlcNAc., J.Biol.Chem., 14 January, 2004 (14.01.04), 10.1074/jbc.M310614200	1-16
P,X	Tetsu HIRUMA et al., "Shinki Hito Toten'i Koso β 3GalNAc-T2 Idenshi no Cloning to Kino Kaiseki", Biotechnology Symposium Yokoshu, 11 November, 2003 (11.11.03), Vol.21, pages 137 to 140	1-16